



SMART - COMET Project

Competence Management
Model and Platform (IT Tool)

School-Enterprise
Cooperation Studies (O2)

Communication Activities



Funded by the
Erasmus+ Programme
of the European Union



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Extentionification Activities

Project Effect and Sustainability

Structural Method (SMART COMET) Project for Competence Management in Metal Industry

- ⚙ Establishing a cooperation model between schools and enterprises including the competence management (COMET) approach for the metal industry and widening thereof on pilot basis and the establishment of a bridge between the vocational education and training institutions and the industry,
- ⚙ The project is accomplished by aiming to establish the framework allowing the employees of the metal industry enterprises to achieve better results towards the business strategies by managing their competences more effectively as a model by addressing the experiences of the member States of the European Union.

Project Time Period: 12.12.2016 – 5.04.2019

Project Budget: € 225.640



Ministry of National Education Directorate General for VET:

The public institution that undertakes vocational and technical education determines vocational education policies.



DEKRA Akademie GMBH:

DEKRA Akademie is one of the leading educational providers in Germany and boasts more than 30 years of experience in vocational and further education.



MESS Training Foundation (MEV):

MESS Training Foundation is founded under the leadership of Turkish Employer's Association of Metal Industries (MESS) in 1986. It offers different training development programs for employees and students attending vocational and technical education.



FLM Fundacion Laboral Del Metal:

The employer organization of the metal industry located in Spain, offers training and consultancy services to more than 20.000 employees annually.



SMART COMET - Figures



23 Protocols with 21 Schools and
18 Enterprises



€ 225.640 Project Total Budget



700 Days of Effort



4 Different Enterprises
Pilot application with 8 field
workers



3 Different
Countries
(Germany,
Turkey, Spain)



5 Visits Abroad



30 Days
Working Visits



10 Enterprises –
14
Representatives



13 VET
Representatives



10 Ministry
Representatives



20 Civil Society
Representatives



9 Provinces 17
Schools – Field
Research with
75 participants



⚙️ Quality Auditor:

- ⚙️ Hanna Schrankel / European Union Educational Projects Senior Consultant
- ⚙️ **Quality Report 1** – External Audit – November 2017
- ⚙️ **Quality Report 2** – School-Enterprise Cooperation Evaluation– February 2018
- ⚙️ **Quality Report 3** – Working Visits Evaluation – May 2018
- ⚙️ **Quality Report 4** – COMET Intermediary Evaluation – October 2018
- ⚙️ **Quality Report 5** – Project Effort and Sustainability Evaluation – December 2018
- ⚙️ **Quality Report 6** - Final Report – February 2019



Study Visits

Spain
Santander,
24-29 April, 2017
**Basque Region/
San Sebastian**
9-13 Oct, 2018

Germany,
Stuttgart,
14-19 May, 2017
10-15 Sep, 2018

Turkey,
Istanbul,
13-18 March, 2018

Smart Comet

Project Outputs

C1 | **C2**

C1 Competence Management Model

Exam-Based System

- Exams and tests to measure technical competencies
- Certification



System Based on Technical Development

- Measuring and improving competencies
- Feedback Culture
- Sustainability

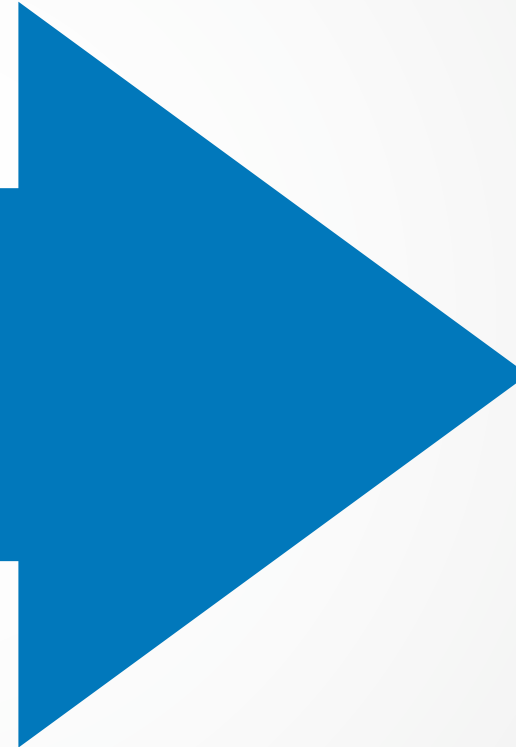
Business-Based System

- Institution's own competence model



System Covering Overall Industry

- Qualifications recognized by the sector
- Consensus among industry institutions
- Free movement of labor within the metal industry



⚙ Theoretical and practical application for Machine Maintenance (Level 3) was conducted with 8 field workers in 4 different enterprises.

⚙ Arçelik Çayirova Washing Machine Plant

⚙ Türk Traktör ve Ziraat Makineleri A.Ş

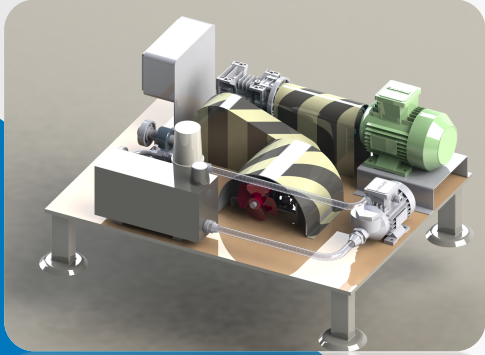
⚙ Ford Otomotiv Sanayi A.Ş

⚙ İçdaş Çelik Enerji Tersane ve Ulaşım Sanayi A.Ş



The model has been applied in the field and development areas have been detected.

C1 Competence Managemet Model



**Pilot machine is designed
and started to be used**



**Development areas of 8
employees were indentified
by pilot application**

Yeni Sınav Ekle

Tür(Teorik/Pratik) Seçiniz... Sınav Türü Seçiniz... Seviye Seçiniz...

Revizyon Revizyon Seçiniz... Sınav Tarihi Sınav Tarihi Not Yeterlilik Derecesi

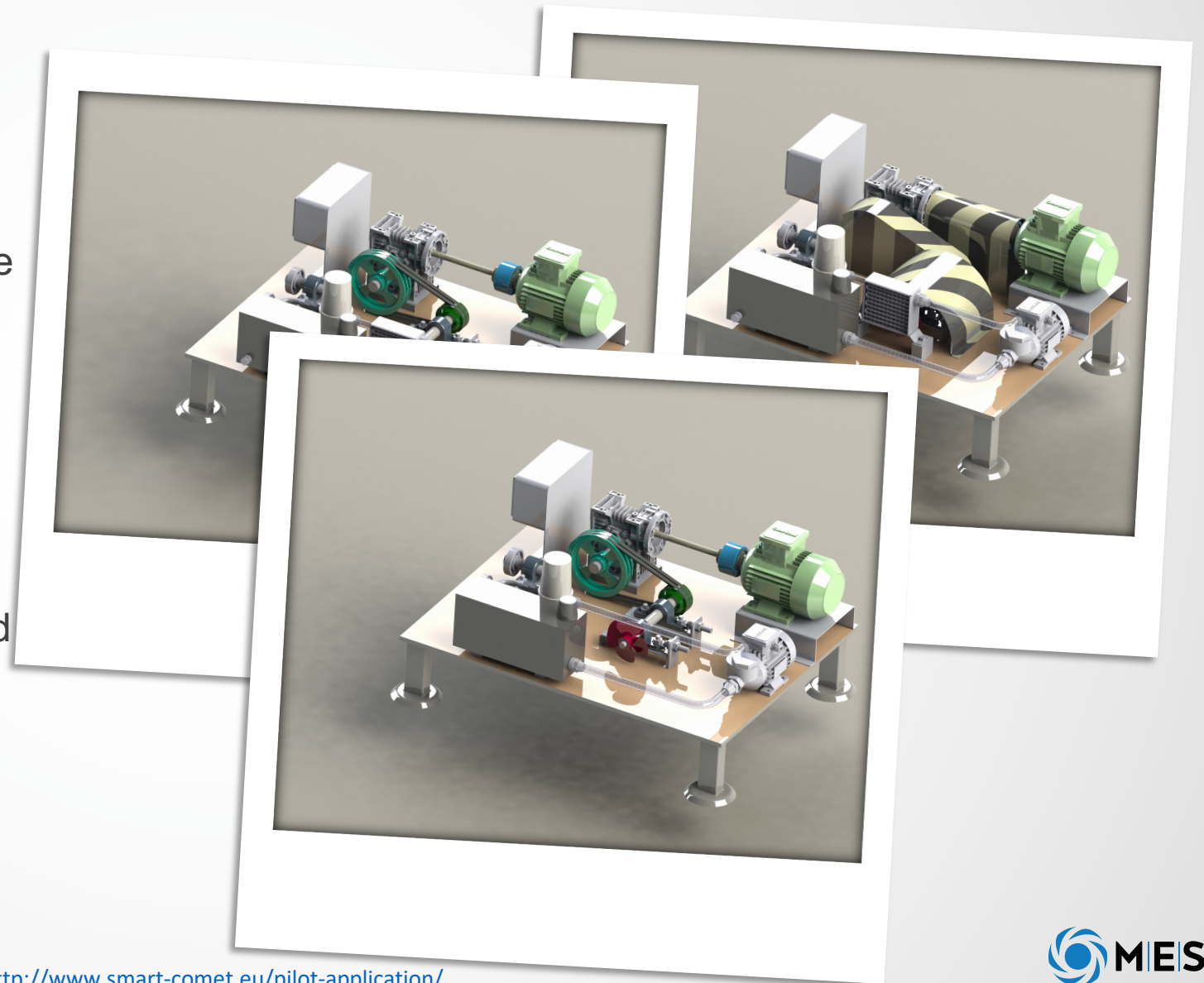
EKLE VAZGEÇ

Çalışan Sınavları

	Yeterlilik Tipi	Yeterlilik Derece...	Beklenen Not	Yeterlilik Oranı	Sınav Tarihi	Oluşturulma Tarihi
	A1	22	70	0.31	15.12.2018	07.12.2018
	A2	100	80	1.25	13.12.2018	07.12.2018

**Competence development
platform is created**

- ⚙ Measurement of technical competencies without interruption of production
- ⚙ Having chance to observe employee's development areas and being able to give feedback during the assessment
- ⚙ Saving time due to the compact structure of the machine
- ⚙ Providing a safe working environment in terms of occupational health safety
- ⚙ Standardization of prototype machine and its dissemination in different enterprises





- ⚙ Keeping employees' competencies under record
- ⚙ Comparison of technical competencies with country average
- ⚙ Identifying the strong and developmental aspects of employees
- ⚙ Implementation of employee specific development program

Yeni Sınav Ekle

Tür(Teorik/Pratik)	Sınav Türü	Seviye
Seçiniz..	Seçiniz..	Seçiniz..
Revizyon	Sınav Tarihi	Not
Revizyon Seçiniz..	Sınav Tarihi	Yeterlilik Derecesi

EKLE **VAZGEÇ**

Çalışan Sınavları

	Yeterlilik Tipi	Yeterlilik Dere...	Beklenen Not	Yeterlilik Oranı	Sınav Tarihi	Oluşturulma Tarihi
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**DRAFT**

C2 – School – Enterprise Cooperation Model



**School-Enterprise
Cooperation
(Germany)**

⚙️ Germany:

- ⚙️ The school – enterprise cooperation is supported by all stakeholders
- ⚙️ Professional chambers are the parties of the contracts that are signed by the students and employee's rights of the students are provided during their training
- ⚙️ Professional chambers take place in assesment exam team and dissertation jury
- ⚙️ The teachers update their skills by a training program every 5 years that is made obligatory by the government.



**School-Enterprise
Cooperation
(Spain)**

⚙️ Spain:

- ⚙️ The enterprises that are implemented dual vocational training can hire all the postgraduate students
- ⚙️ Since the school number is low, the government's sources for vocational training is high. Commercial concern associated with the cooperation with enterprises is prevented.
- ⚙️ The students who attend vocational and technical schools are included in R&D works by the enterprises for innovation



School – Enterprise Cooperation Report

Assesment of the Samples of the EU Countries Using
ECVET Tools

A questionnaire conducted in 17 Vocational and
Technical School by MEB MTEGM

Assesment of the Competent Management Practices
of the EU Countries

Implementation of Vocational Competence
Questionnaire in Germany and Spain

Practices of the Cooperation of School-Enterprise in
Metal Sector and ECVET Tools

Country reports of project partners





⚙ For metal industry;

- ⚙ Enhancing employability of the workforce by using the competence management systems based on learning outcomes of the ECVET, good quality of methods, provision of suitable skills and competence of their staff

⚙ For students and professionals;

- ⚙ Supporting the workers' employability by access to training programs, recognition of life-long learning and mobility through continuing vocational education and training (CVET)
- ⚙ Supporting the ongoing preparation for the implementation of the National Vocational Training and Competence Systems ECVET in related countries.

The efficacy of the SMART COMET project will increase by different activities that will be done in cooperation with public or private sector in order to provide more flexible vocational education and training according to the needs of the sector and extend life-long learning by continuing vocational education and training (CVET).

Project Timeline (2017 / 2019)





Thank You